

## Abstract

A polarizing glass comprising geometrically anisotropic particles dispersed in an oriented manner in at least the surface of a glass base body. The glass base body is denoted by the weight percentages of 50-65 percent  $\text{SiO}_2$ , 15-22 percent  $\text{B}_2\text{O}_3$ , 0-4 percent  $\text{Al}_2\text{O}_3$ , 2-8 percent  $\text{ZrO}_2$ , 6 percent  $< \text{Al}_2\text{O}_3 + \text{ZrO}_2 < 12$  percent, 6-16 percent  $\text{R}_2\text{O}$  (where R denotes at least one from among Li, Na, and K), 0-3 percent  $\text{Li}_2\text{O}$ , 0-9 percent  $\text{Na}_2\text{O}$ , 4-16 percent  $\text{K}_2\text{O}$ ,  $\text{Li}_2\text{O} + \text{Na}_2\text{O} < \text{K}_2\text{O}$ , 0-7 percent  $\text{BaO}$  and/or  $\text{SrO}$ , and 0-3 percent  $\text{TiO}_2$ . The glass base body comprises per 100 weight percent of essentially the above composition at least 0.15-1.0 percent Ag and at least the chemical equivalent to Ag of Cl and/or Br; and the geometrically anisotropic silver particles are metallic Ag particles. The polarizing glass is employed in optical products such as optical isolators.

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